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ABSTRACT

This exploratory study examined the college search processes of 25 non-traditional adult students at two central New York State community colleges. Using a modified time-line interview, a method developed in communication and information sciences, the researchers found that the college student's choice process was significantly different for the nontraditional students than demonstrated in the traditional models. Among the frequently mentioned influences in college choice by adult students was cost and location. The college selection process was also found to be quite brief; most deliberations centered around the actual act of returning to school. The results of the study suggested that the time-line interview methodology was successful in eliciting the college selection process from these students. Contains 9 references. (GLR)

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Using Time-line Methodology for Finding Adult Student College Selection Information Behaviors: An exploratory study of the methodology

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Paper presented at the Association for the Study of Higher Education Conference, Boston, Massachusetts, October 31 - November 3, 1991

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Park Plaza Hotel & Towers in Boston, Massachusetts, October 31-November 3, 1991. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Using Time-line Methodology for Finding Adult Student College Selection Information Behaviors: An exploratory study of the methodology

By Robin P. Peek and Andrew S. Goldstein

Abstract

This paper describes the results of an exploratory study that examined the college search processes of non-traditional adult students at a community college. Using a modified Time-line interview, a method developed in communication and information sciences, the researchers found that the college student choice process was significantly different for these students than demonstrated in the traditional models. It was also found that this methodology was successful in eliciting the process from these students. The authors conclude that this study signals that this area has many opportunities for further research. A reference list is provided.

INTRODUCTION

How does a prospective college student go about selecting a college to attend? It is imperative that the administrators of postsecondary institutions grasp the intricacies of the student college selection process so that their institution's attractiveness to the student and the probability of selection by the student are maximized. In this time of declining enrollments and decreasing financial support, discovering and analyzing the search patterns of prospective college students is critical.

An investigation into the student college choice process by Hossler and Gallagher (1987) has suggested a model which categorizes this process into three stages: 1. Predisposition, 2. Search, and 3. Choice. This model was based on the studies of R. Chapman (1984), Jackson (1982), and Litten (1982) (Hossler, Braxton, and Coopersmith 1989). The Predisposition phase (stage) describes the period where students determine whether or not to continue their formal education after high school. Although it has been determined (Hossler, Braxton, and Coopersmith, 1989; Hossler and Gallagher, 1987) that actual studies of this phase are limited, correlates such as socio-economic status and academic ability have been frequently cited in the research as factors influencing the predisposition phase. The Search phase is characterized by the search and identification of those postsecondary institution attributes which the student finds attractive. The Choice phase consists of choosing an institution based on the information obtained in the previous stages.

The recent review of the college student choice literature by Hossler, Braxton, and Coopersmith (1989) found that "the search stage of college selection has received little attention"

(p.249). Little is known about how students go about collecting and evaluating information about postsecondary education institutions before they select the institution to which they will apply (p.249). They also concluded that research on the choice process has "focused primarily on traditional-age [18-24] students (and)...research on the college choice process for adult students is scarce" (p.280). Furthermore, "little attention has been paid to the college choice process for community college students" (p. 280). Hossler, Braxton, and Coopersmith conclude that "[s]ince adult students and students attending community colleges are more likely to be geographically bound, their Choice stage may look very different" (p. 281).

There is an underlying assumption that colleges would seek to enhance their attractiveness to potential students by enhancing the value of their information, thus helping students decide which college would best address their needs. Therefore, we found this last assertion of Hossler, Braxton, and Coopersmith to be rather surprising since a classical definition of the value of information would be likely to emphasize a reduction of uncertainty (Rouse and Rouse, 1984). What is suggested here is the possibility that the value of information as perceived by adult and community college students may not resemble that of traditional age students and may be reflected in the Choice stage.

METHODOLOGICAL BACKGROUND

While the review of the literature revealed key areas needing further study, it did not provide direction towards

effective methodologies that would be able to elicit the search patterns from students. Since this research problem employed a situation that **could** be deemed an information or communication problem, it seemed appropriate to consider methods from the information and communication sciences.

Currently, there is a great deal of attention within these two fields devoted to understanding human use **of** and interaction **with** information systems. "The primary practical benefit of this attention is felt to be the design of better (i.e. more effective) information systems" (Nilan, Peek, and Snyder, 1988). During this past decade there has been considerable interest in user-oriented approaches because it looks at the situation from the user's rather than the researcher's perspective. This views the information seeking process from the open-ended reality as seen by the individual, not the limitation of any particular system. For the purposes of this study, such examples of an "information system" **may** include: 1. a computer program that assesses a student's career interests, 2. a college admissions office's mailings, or 3. a college counseling office's system of handling new students. In the past, such traditional studies were more concerned with rating whether or not these services were **used** by a potential student, **rather than** consideration for the process or the questions generated by the student.

The study of user-oriented research approaches is still relatively new to the information and communication sciences,with only a few methodological approaches having emerged as reliable and well-tested. One of these is the Time-line Interview which came from Brenda Dervin's work in Sense-Making (1983). The

methodological approach is considered stable, while the interview structure and the elicitation process create the equivalent of a qualitative interview. Time and care must be spent developing the interview environment in an effort to create an interview protocol that will provide the subject the opportunity to discuss his/her own reality while allowing the interviewer to probe beyond surface rationale. This is often a lengthy process because the protocol must be adapted to the reality of the user not the researcher.

CONCEPTUALIZATION

Studying this process poses certain challenges for the researcher because the object being studied is the **process** and the interview must frequently be conducted at some point after the student has undertaken the process of the search. Again, what was sought here was not to create another study of how a student "used" a system, but what strategies were employed to fulfill an information need. Thus, this is a **user-based** study focusing on cognitive processes of the student, not a traditional "user" study.

We begin with the premise that the potential student is aware of some need that may be ill-defined or clearly known. This is consistent with Wilson's (1981) proposition that "information-seeking behavior results from the recognition of some need, perceived by the user" (p.4). Once this need is perceived, what the user does with it is generally his or her own decision. A user or potential student can: 1) query him/herself and "look within" for the answer, 2) choose to ignore this

information need and put it on the "back burner" for days, months, or years, 3) passively seek out information; receiving "unfiltered information" such as from a television show or newspaper advertisement, or 4) actively seek out information from an information system such as the college.

Recently, work has been conducted in the area of information need, with one of the most tested user-centered methodologies coming from the "Sense-Making" research orientation.

> The term "Sense-Making" is a label for a coherent set of concepts and methods used ... to study how people construct sense of their worlds and, in particular, how they construct information needs and uses of information in the process of sense-making. Since sense-making is central to all communicating situations, (whether they be intra-personal, interpersonal, mass, cross-cultural, societal, or international) the Sense-Making approach is seen as having wide applicability. (Dervin, 1983, p.2)

Sense-Making rests on a set of core theoretical premises that are extensively discussed in the Dervin paper and will not be discussed here. The Sense-Making approach rests on the following model:

Figure 1: Current model used in Sense-Making studies (Dervin, 1983)

SITUATION----GAPS------USES

Situations are defined as the time-space context where sense is constructed by the subject. Gaps are those "information needs" or questions that people have at that time. A gap is something that is not known; however the subject may or may not ask the question out loud nor ever receive an answer in order for a gap to be considered valid. For the purposes of this study, a gap may be an adult student's desire to continue his/her

education, but not knowing how to go about the process of picking a school. A gap may also be as simple as the desire to get from point A to point B in an unfamiliar city.

This concept deviates from "systems models" of information seeking and use, which normally requires that a question not only be asked out loud, but that the system can legitimately be expected to answer it in order for the model of use to be constructed. The final area that needs definition is that of **use**. **Use**, as frequently used in sense-making research, describes how receiving information either helps or hurts the decision-making process. The concept of **use** also extends to how the subject values the information, regardless of its "rightness" or "correctness".

For a more indepth discussion on the foundation of the Time-line and previous research efforts using this method and it's foundation in Sense-Making, see Brenda Dervin's 1983 paper "An Overview of Sense-Making Research: Concepts, Methods, and Results to Date. Dervin notes (p.89) that:

> The Sense-Making approach acknowledges the utility of observer assessments of situational conditions and the idea from Critical Theory that there are structural constraints which limit sense-making and communication which are out of consciousness to many people. Sense-Making assumes, however, that there is utility in starting with the person and finding systematic ways of having individuals share their observations about all manner of situations, including those they see as structurally constrained. It is further assumed that one reason why research focusing on individual behavior has been so unfruitful in the past has been that it has searched for across time space constancies.

SAMPLE EXPLORATORY POPULATION

Given that this is primarily a methodological study, we chose to limit the focus of our subject matter to the adult student, owing to the scarcity of research on the choice process and our interest in the assertion by Hossler, Braxton, and Coopersmith of a Choice stage which may possibly look different for the adult and community college student. By studying the use of this methodology with adult students in the community college, we were able to touch upon the points of information raised by Hossler, Braxton, and Coopersmith. We emphasize the fact that as an exploratory study, we did not intend our sample to be comprehensive.

Respondents were self-selected volunteers from two central New York State community colleges. All respondents fit the definition of "adult student," defined as those individuals, age 25 years and older, who are participating in a formal learning project (Aslanian and Brickell, 1988). In the pilot and overall study, respondents were 25 to 60 years of age. There were 17 female respondents and 8 male respondents.

METHODOLOGY

We have chosen an aspect of the Dervin's "Time-line Methodology" because it "presupposes no particular information system, thereby giving us access to any and all information systems" (Nilan, Peek, and Snyder, p. 154).

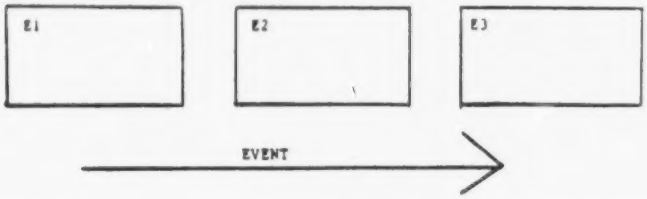
Following a series of pre-tests, we used a modified version of Dervin's Time-line. The Time-line, as we used it, asked respondents to describe their selection process as a journey

beginning with their thoughts of a return to college and ending with their decision to attend a particular college. We asked them to get a picture in their minds of the events and use the imagery to create the equivalent of a mental filmstrip.

Creating a mental filmstrip of their experience so as to help orient the respondent, we adapted the three-stage model of student college choice used by Hossler and Gallagher (1987) and Hossler, Braxton, and Coopersmith (1989). As previously described, this model uses the stages of Predisposition, Search, and Choice to describe this process and was adopted as a framework for the initial design of the interview.

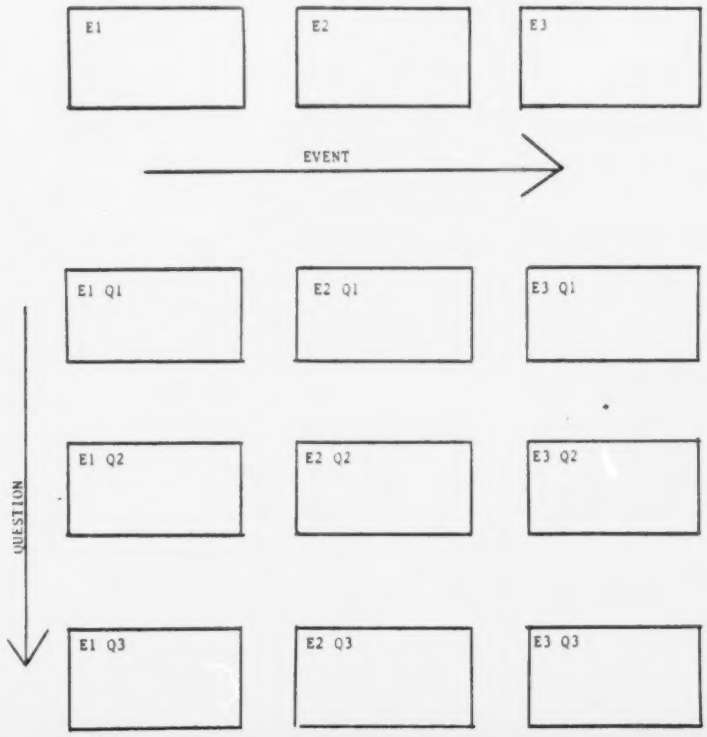
The interviewer gave the respondent an initial orientation to explain the purpose and scope of the interview. As with most Time-line studies, the respondent chooses the starting point and the ending point (from his/her own frame of reference) with the different stages laid out as events. These events are recorded briefly on blue (or any color) 3x5 cards which are then laid out horizontally in front of the respondent. The cards are physical representations of each event, hence the illusion of the filmstrip. This presentation not only facilitates recall, but assists in keeping the respondent focused on the events being studied. Following the recording of each event, the statements of the respondent are read back to them to make sure that they are what the subject meant to say.

Figure 2: The event cards



Respondents were then asked to recall the questions that she or he had at that particular point in time. Each question was then written on a white 3x5 card (to differentiate from the "event" card) and placed underneath the event. This was continued until all events and questions had been presented. Questions posed by the respondent varied from concerns with child-care and parking at the school to feelings of discomfort and (in some cases) fear of being in the classroom.

Figure 3: The event and question cards



We departed from the traditional Dervin Time-line in that we used a protocol to further tap into the respondents actions behind the resolution of these questions. We identified points in the Time-line to probe further. Using a combination of open-ended questions and Likert scale questions, the interviewer investigated further using the techniques of probing (for clarity, coverage, or depth) as described in Nilan, Peek, Snyder (1988). This type of probing allowed the respondent to explain his/her actions as fully as possible while getting at key information desired by the researcher.

Analysis was conducted using standard content analytic techniques. Although there are a variety of techniques available for content analysis, "clustering" was deemed most appropriate for our purposes, as dictated by the data (Krippendorff, 1980). "Clustering seeks to group or to lump together objects or variables that share some observed qualities or, alternatively, to partition or to divide a set of objects or variables into mutually exclusive classes..." (ibid, p. 115). This generates a coding scheme consisting of categories and rules for placing a recording unit in a category or cluster. These rules imply that the research be capable of verification by outside researchers, which in turn, expands on "shared meaning" between the researcher and the outside world.

FIELD TESTING THE METHODOLOGY

The procedures were pre-tested on four respondents and then applied to 21 additional respondents for a total of 25 respondents over a 2 month period.

We found, as did Dervin, that these interviews tend to average 60 minutes or longer. This is credited to a tradition on high respondent interest and involvement as well as high interviewer interest (Dervin, p. 13). It was indeed discovered that 24 of the 25 respondents expressed their willingness to help the study "in any way possible" and that they were "glad that someone was showing an interest in us".

It was also discovered during the pre-test phase of the instrument that certain modifications were needed in the terminology used to elicit responses. The first generation instrument used attempted to elicit information using more concrete imagery, e.g., asking the respondent if he/she received a **definite** answer to a **specific** question. Given the more abstract nature of some of the information we were eliciting, i.e., fears and concerns tend to be more abstract, the language was "softened" so as not to pressure the respondent into giving specific concrete answers when no concrete answers could be given. For example, rather than asking the respondents to tell us **what** made them **decide** to return to school, they were asked to **recount** the time when they were **considering** a return to school. The abstract nature of the interview allowed for repeated probing by the interviewer in the attempt to elicit all related aspects of the students' experiences.

At the design stage of the instrument, we attempted to break down the events of the college selection process into **four** stages, in an effort to gain as much detail of the process as possible. It was determined that the steps taken in college selection by this sample population frequently did not warrant

the inclusion of the four initial stages, but limited itself to three stages. The middle two stages, differentiating "college selection" and "community college selection" were consolidated into one stage. The resulting instrument reflected the three stage process used by Hossler and Gallagher (1987).

CONTENT ANALYSIS AND RESULTS

Initially we sought to answer three questions: 1. what were the stages of the search process for the adult student?, 2. what were the sources used?, and 3. what were the criteria used for selection? The resulting text, however, was found to be very "rich" with the potential for further analysis.

The researchers first compiled an open-ended list of all the responses that they received without regard to frequency because a single respondent may list the same source repeatedly (from one interview). Then a set of rules were developed using standard content analysis procedures. Using random sub-samples of the interview transcripts, interjudge coding reliability was determined.

For this paper two data sets will be discussed: 1. the sources of information used, and 2. the criteria used by adult students for attending their chosen college (in this study, the community college). Table 1 describes the information sources that these adult students used for deciding whether to return to college. Some categories did not surprise us. For example, respondents frequently turned to friends and co-workers for information and advice. Family played an important role but often it was the children or spouse who influenced decision

making. Also, parental influence can linger for many years. One respondent's reference to the desire of her parents for her to go to college as a youth, played an important role in her decision to go to college many years later. We were surprised that while adult students were frequent users of college counseling services, they rarely used college print materials. One respondent did make her decision to not only attend college, but to attend the community college on the strength of one newspaper article and an advertisement for the college.

TABLE 1: SOURCES OF INFORMATION USED BY ADULT STUDENTS

1. Self

2. Family
   a. parents - both present and past reference
   b. adult relatives
      - daughter in-law
      - sister
      - cousins
   c. children

3. Significant others
   - live-in lover
   - current or ex-boyfriend or girlfriend
   - ex-spouse
   - fiance

4. Friends and acquaintances
   - knew someone attending school

5. Work related sources
   - co-workers
   - boss

6. Education professionals at institutions studied
   - faculty
   - counselors
   - advisor
   - Learning Center Director

7. Faculty at other colleges

8. College print information
   - catalogs
   - brochures
   - aptitude and achievement tests
   - advertisements

9. Other print sources
   -newspaper article

10. Other professionals
    - therapist or psychiatrist
    - nurse
    - parole officer
    - priest or pastor
    - dentist
    - physician
    - vocational rehabilitation counselor
    - welfare agent
    - bank officer
    - marriage counselor

11. Education professionals known through family association
    - spouse's contact at work
    - children's high school guidance counselor or teacher

12. Unique or non-professional sources
    - God (prayer)
    - sponsor from Alcoholics Anonymous
    - landlord
    - host family

Many of the sources used by these adult students were different from those usually described in traditional student models of influential sources. We found that respondents frequently turned to trusted professionals outside of the college for assistance in their decision to attend college and which college to attend. We were particularly surprised at the variety and uniqueness of the "professional sources," e.g., parole officer, welfare agent, and bank officer. We were also surprised that respondents often sought out the high school counselor or teacher of **their child's** school.

Table 2 shows respondents providing a somewhat limited range of rationale to support their decision to attend the community college. Respondents frequently cited **location** and/or **low cost** as the chief criterion(a) for their selection. Sixteen of the twenty-five participants cited "convenience" and the desire <u>not</u> to relocate as reasons for their choice. For one respondent in particular, geography played an almost exclusive role in her decision. She was interested in a particular program offered at two regional community colleges that were of some distance to her home. Despite a lengthy commute of over one and one half hours to the nearest of the two colleges, the respondent chose **that** college rather than take up temporary residence at the college further away, necessitating separation from her family for a significant length of time.

Cost was cited by fourteen of the twenty-five respondents in their rationale. When dealing with the issue of **cost**, it was found that the knowledge of low cost was based exclusively on community-based reputation, with the respondents never looking at

other colleges to compare or to validate the truth to that claim.

TABLE 2: RATIONALE FOR CHOOSING THE COMMUNITY COLLEGE

1. Location
   - grew up in the area
   - didn't want to be relocated
   - didn't want to uproot family
   - convenient, transportation (wife), and close
   - didn't know where other colleges where

2. Cost
   a. less expensive than other programs
      - financial aid was available
      - all I could afford
   b. free - (paid for by employee (both internal and external to the institution) benefits
      - by local company (external)
      - by Veteran's Administration
      - through spouse (internal)
   c. perceived value

3. Program offering
   a. unique academic program offering
      - dental hygiene program
   b. unique support service offering
      -Learning Center
   c. transferability
   d. respondent's stated desire of only a 2 year program

4. Decision made by separate party
   - state agency
   - Veteran's Administration

5. Influence of individuals
   a. family members attending institution
      - wife (spouse)
   b. significant others attending institution
      -girlfriend
   c. friends attending institution
   d. knew people attending institution
      - teachers
      - trustee

6. Physical environment
   - wanted to relocate to country setting

7. Student perception of college environment
   - a. internal (curricular) environment
      - less threatening than 4 year college
      - less academically demanding
      - wanted to start slowly
      - got good summer grades
   - b. internal (social) environment
      - people (as previously defined) were friendly
      - least amount of corrupt behavior (between colleges selected)
      - least number of Black individuals
   - c. external (physical/campus) environment
      - pretty campus
      - felt safe here
   - d. college environment as a function of a, b, and c.
      - better off of I actually <u>went</u> to school instead of correspondence school
      - responds more to adult student needs

8. Previous relationship with the community College
      - got GED from community college
      - worked at community college

9. College reputation

The degree to which these adult students cited **location** and/or **cost** as the sole criteria for community college selection

persuaded the authors to label them "hostages of choice." These adults, with responsibilities quite different from traditional college students were not about to relocate, even for the sake of furthering their education.

The idea that these students were "hostages" was validated by their viewing **cost** as more than just "affordability." However, **Cost** also meant "perceived value" to many people. One respondent, whose annual family income exceeded $50,000 and was seeking a four-year degree, perceived the community college as a better value for lower-division courses than private four-year institution to which she eventually hoped to transfer.

Of perhaps greater significance with respect to being a "hostage" was the role of employee or other source benefit programs. These benefits could be "internal" to the institution e.g., free tuition for spouses of employees or they could be "external" to the institution as provided by a local company or state agency. Frequently these programs prescribed limits as to which colleges a student could attend or placed an upper monetary limit as to how much of the cost would be paid by the benefit program. These stipulations served to mold the decision-making process used by students. The very existence of such programs also served as a catalyst that drew respondents back to college because they wanted to make use of the benefits. Also of relevance was the finding that three adult students, following psychological and aptitude testing, were told by their respective representative agencies that their education would be paid for **only** if they attended the local community college.

Respondents also placed value on the approachable and

friendly environment they found at the community college. Often this was developed through direct contact by the student. Students also cited the beauty of the country-side in which one campus was located. They also cited the "friendliness" of staff members and faculty when approached with various questions. Occasionally this "approachability" was pre-conceived by community-based reputation or comments made by information sources. Conversely, other four year institutions in the area often had negative reputations in terms of being considered approachable, so much so that students did not choose to even pursue looking into other colleges. The community college was seen as being a more supportive an environment for the adult student. It was not surprising that these students did not find such factors as social life and athletic teams (important to traditional students) as factors that either influenced their decision or were of any importance to them.

We were particularly struck by the single-mindedness of many of the respondents who, while looking solely for program offerings, did not engage in any active evaluation of the programs to which they were committing. They were far more concerned with their ability to "fit in" to the college environment than with the "program ranking" or faculty/student ratio. Within the data are consistent references by the students to being able to "fit in." Questions such as "can I do this?," or "will I be able to handle the work?" were expressed along with concerns about being "so much older" than the other students. The self-esteem of the adult student seems paramount to more program oriented concerns. Promotion materials generated at the

program or college level, as they exist at present, seemed to have little influence over the decision-making processes of the adult student.

THE COLLEGE SEARCH AND CHOICE PROCESS

The college selection process employed by the adult students in this project was quite brief, in most cases. Most deliberations centered around the actual act of returning to school. Once that decision was made, the college choice came almost immediately, often bypassing the search stage.

Only in three cases were other institutions considered for any length of time. With each of these students, however, the decision was eventually made based on the above criteria. These three respondents, support, in a limited way, the three-stage model of student college choice used by Hossler and Gallagher (1987) and is more in line with the selection process used by traditional age college students.

The search process for these students resembles the following:

consider going to college	> consider various colleges	> go to community college

For the majority of respondents in this study, the search process resembles the following:

consider going to a college	>	consider only the community college	>	go to community college

or

consider going to a college	>	go to community college		

In many cases, the journey from the decision to attend college to the decision to attend the community college was quite short.

CONCLUSIONS

There are many variables that affect information behavior. Mick, Lindsey, and Callan (1980) describe three main categories of attributes: 1. Individual attributes (demography, training and professional background, organizational role and function, attitudes related to work and profession, and attitudes related to the value of information), 2. Work Environment attributes (organizational demography, work teams, communication networks), and Task attributes (basic verses applied, diffuseness of task; rate of obsolescence of information; phase of project; and criteria for satisfactory completeness of task) (p. 346). If we consider these in context for the adult learner it is therefore not surprising that there are significant deviations from the traditional models and attributes of the traditional college age student.

The sample used here was small, but a surprising number of the students may be considered to be hostages of choice; those

who lack the means to consider any other alternatives in their choice of college. These hostages are essentially "locked-in" by either limited resources or limited geographic mobility and cannot consider more distant or expensive alternatives. For other students it is the reputation of the college in the community, the "friendliness" or "approachability" of the college personnel, and its more physical features such as availability of parking which make the college attractive. Perhaps they, too, are hostages since there may be the perception by the student that no other school has the reputation as being friendly.

For most of the adult students in this study, the key question focused on solving the personal problems (self-esteem) of going to college rather than which college to attend. This is a situation which students found traditional college information sources ill-equipped to be of service.

Adult students in the community college challenge traditional models. We found the various models of college student selection described in Hossler, Braxton and Coopersmith to not be evident with this population. Even for those students who were more mobile or had additional resources, the number of colleges considered were very small, if any were, indeed, considered. Community-based reputation, such as "approachability," was a far more important factor than traditional criterion such as national ranking. Often students were limited by an additional restriction; employer-related benefits that specifically define which institution or which type of courses were under the umbrella of tuition reimbursement.

In a recent work (1989) Dervin has argued that "further

understanding of the traditional versus alternative categorizations of users comes from comparing and contrasting the two sets and examining potential relationship between them" (p.15). We support this assertion and we believe that a greater understanding of adult learners and community college students would greatly enhance all aspects of the student college choice processes and those services designed to support them. It is not our assertion here to suggest that previous models are wrong or flawed, instead we argue that services and publications are geared to a traditional population model. This study is far too limited to create generalizations, but we hope additional work in this area will allow for comparing and contrasting the needs of these different student groups.

Although the methodology was time-consuming it did work quite well. It does warrant continued use in looking at these types of behavior patterns, in addition to other applications. This is important because it provides not only more usable "user studies" than many of the traditionally administered forms of such studies, but it also offers a study that is much closer to the interaction processes of "real life" students. Such inquiries may explain or resolve information-related problems which may have occurred because of the unique attributes that may be in the adult or the community college.

We feel we must caution others who attempt to use this methodology. It is time-consuming, particularly in its initial design. Unlike in-depth qualitative studies where completely open-ended questions can be employed, it is necessary to map out a protocol ahead of time. This protocol must be subject to pilot

testing to insure it's stable, that the respondent understands the questions, and that the questions are, in fact, answerable.

The interview must include events that are memorable enough to have left an impression on the respondent. While the decision to go to college is important, the decision to attend a one-day workshop may be less significant.

Interviewers must be carefully trained for this, as in any other Time-line (or Sense-Making) study. The success of the interview depends on not only the sensitivity of the interviewer, but in their complete understanding of the methodological approach and the type of data that is collected.

A final caution is that the analysis section must always be considered carefully. One concern with any Time-line (or Sense-Making) study is that the data pool be manageable and reasonably handled through content analysis. The analysis process is also labor intensive and time consuming in spite of the fact that this is a small sample size method.

Despite these cautions, we are excited by the possibilities that this method can have for determining the selection process of college students.

FUTURE RESEARCH

This area is ripe for further research. This study reveals a different perspective on the models of college selection that have previously been identified. Because of this we suggest that, in addition to further work using this methodology for non-traditional students, additional studies using this method on traditional populations be employed to determine if these models

do reflect the students' perceptions of the choice process.

We also think that further research in the value-added processes of these information sources would be an interesting study. We were particularly intrigued by the apparent value of these non-traditional sources that were used and how these were valued and evaluated by the respondents. Along similar lines, we would like to see the development of models that would aid in the design of better serving the information needs of these populations.

This technique has potential use in counseling situations. The interviewer's ability to aid in the recall as well as keeping the respondent focused on the event could be useful.

As we stated from the outset this study was exploratory in nature. The successful application of this methodology in eliciting college selection behavior patterns from adult students in the community college suggests continued research into these behavior patterns in a more detailed and specific vein. Whereas, the research focus of this study rested on a specific methodology, with a number of research questions used as a means of investigation, future research may do well in making these questions of the adult or community college student college selection process the focus of the investigation.

REFERENCES

Aslanian, C. B., & Brickell, H. M. (1988). How Americans in transition study for college credit. New York:The College Board.

Colin M. K., Lindsey G. N., Callahan D. (1980). Toward usable user studies. Journal of the American Society of Information Science, September, 346-356.

Dervin B. (1983, May). An overview of sense-making research: concepts, methods, and results to date. A paper presented at International Communications Association Annual Meeting.

Dervin, B. (1989). Users of communication/information systems as research inventions: perpetuating myths, reifying inequities. In a special issue of the Journal of Communications called New Communication Technologies: The Haves and Have-Nots.

Hossler, D., Braxton J., Coopersmith, G. (1989). Understanding student college choice. In Higher Education: Handbook of Theory and Research IV, Agathon Press, 231-287.

Krippendorff, K. (1980). Content Analysis: An Introduction to Its Methodology The Sage Commtext Series, Sage Publications, Beverly Hills.

Nilan M. S., Peek, R. P., & Snyder, H. W. (1988). A methodology for tapping user evaluation behaviors: an exploration of users' strategy, source and information evaluating. Proceedings of the 51st ASIS Annual Meeting 25, 152-157

Rouse W. B. & Rouse S. H. (1984). Human Information Seeking and Design of Information Systems. Information Processing & Management 20(1), 129-138.

Wilson T. D. (1981). On user studies and information needs. Journal of Documentation 37(1), 3-15.